

OFFICE OF THE PRESIDENT

May 29, 2012

Dean Lisa J. Graumlich College of the Environment Box 355679

Dear Lisa:

Based on the recommendation of its Subcommittee on Admissions and Programs, the Faculty Council on Academic Standards has recommended approval of the following:

- > a new option in Geology within the Bachelor of Science degree in Earth and Space Sciences;
- > a new continuation policy within both the Bachelor of Arts degree and the Bachelor of Science degree in Earth and Space Sciences; and
- > revised program requirements for all of the options within the Bachelor of Science degree in Earth and Space Sciences.

A copy of the changes is attached.

I am writing to inform you that the Department of Earth and Space Sciences is authorized to specify these requirements beginning winter quarter 2012.

The new requirements should be incorporated in printed statements and in individual department websites as soon as possible. The *General Catalog* website will be updated accordingly by the Registrar's Office.

Sincerely yours,

Michael K. Young

President

Enclosure

cc: Ms.

Ms. Noell Bernard-Kingsley (with enclosure)

Mr. Robert Corbett (with enclosure)

Dr. Deborah H. Wiegand (with enclosure)

Ms. Virjean Edwards (with enclosure ESS-20120126)



UNIVERSITY OF WASHINGTON CREATING AND CHANGING UNDERGRADUATE ACADEMIC PROGRAMS

Controles

After college/school/campus review, send a signed original and 1 copy to the Curriculum Office/FCAS, Box 355850. For information about when and how to use this form: http://depts.washington.odu/www//1503instructions.or/

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College/Campus Environment / Seattle	Department/Unit Earth & Space Sciences	Date	1/26/12
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Revised Requirements for the Minor in	- 		
Other Changes			
☐ Change name of program from to to X New or Revised Continuation Policy for Earth & ☐ Eliminate program in	Space Sciences.		
Proposed Effective Date: Quarter: Autumn X Winter	☐ Spring ☐ Summer Year: 20 <u>12</u>		
Contact Person: Noell Bernard-Kingsley Phone:	Email: noelleon@uw.edu	D	051010
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Explanation of and Rationale for Proposed Change:

The overall aim for our curriculum design is to ensure that students graduating from the Department of Earth & Space Sciences are educated across the field as a whole, while gaining sufficient depth and advanced skills to be applied to future steps in research or professionally. Our rationale is that future graduates will be increasingly intentional about future steps, and be educated about State Licensing requirements to ensure a combination of skills and education that will propel graduates into academic and professional fields. Additionally, we aim to assist students proceed through their education within the department by helping them meet academic goals in a valuable and timely manner.

The specific objectives:

- Align our curriculum with the courses required by the State of Washington Department of Licensing for students pursuing State Licensing for Geologists.
- 2. Ensure ESS students in both BA and BS degrees are able to access, understand, and track courses required for State Licensing examination.
- 3. Provide guidance for satisfactory academic progress within the department.

Proposed changes:

- Require that students complete one of four options and create an option in Geology from the existing "standard option" requirements within the Bachelor of Science (Earth and Space Sciences: Standard).
- Describe and add an optional (non-transcripted), activated requirement in DARS (Degree Audit Reporting System) for ESS students in any field of study including Bachelor of Arts, Bachelor of Science in Geology, Biology, Physics, and Environmental options, which will describe, and track courses which fulfill the Washington State Department of Licensing requirement for access to the State Licensing Examination for Geologists.
 - Structural: ESS 211, 400, and one of the following: 311, or 403, or 463
 - Mineralogy: ESS 212, and one of the following: ESS 345 or 437
 - Petrology: ESS 212, and one of the following: 311 and 312, or 439, or 440
 - Sedimentary Geology/Stratigraphy: ESS 213 and one of the following: ESS 313 and 441, or 445, or 456
- 3. Establish clear criteria for satisfactory progress within the degree by implementing a departmental policy for continuance.
 - Please see the attached document outlining our policy.

Continuation Policy for Undergraduates Majoring in the Department of Earth & Space Sciences

While the University has regulations governing the scholastic eligibility for continuance¹, the Department of Earth and Space Sciences defines additional criteria in order to make the best use of department resources available, and to provide reasonable assurance for the academic success of our majors. The following will apply to all students majoring in the Department of Earth & Space Sciences. Students are encouraged to frequently review their academic progress, and may seek advising from ESS Student Services at any time.

Criteria for Satisfactory Progress:

- Students are expected to make satisfactory progress towards graduation with an ESS degree. Under normal
 circumstances, an ESS major attending full-time would be considered meeting satisfactory progress if s/he is taking
 major sequence coursework after declaring the major. Low scholarship, excessive course repeats, excessive course
 drops, and excessive University withdrawals may demonstrate a lack of satisfactory progress.
- 2. Students must earn at least a numerical grade of 2.0 in each course used towards a major requirement. This includes major core sequence courses, major electives, basic and foundational science and math coursework, and field camp. Courses used to satisfy major requirements must be taken on a graded basis. Courses taken as satisfactory/not satisfactory cannot be used towards major requirements.
- 3. Students must maintain good academic standing with the University of Washington. Students must maintain a minimum cumulative GPA of 2.0 to be in good academic standing with the University. Students falling below a cumulative GPA of 2.0 will be placed on the University's Low Scholarship list.
- 4. Students must maintain a graduation plan with ESS Student Services. ESS students will create a plan with ESS Student Services upon declaring the major. Students must maintain this plan with the guidance of ESS Student Services.

Conditions Warranting Recommendation to Alter a Student's Standing:

ESS Student Services will review the progress of undergraduate majors. If a student fails to meet the criteria for satisfactory progress outlined above in any quarter during their tenure as a major in the Department of Earth and Space Sciences, the student may be placed on departmental warning, probation, and in extreme situations, may be dismissed from the major.

Warning

Students will be issued a warning letter by the department at the end of the first quarter in which they do not meet departmental satisfactory progress. The warning letter is issued only one time. Students receiving a warning letter must meet with ESS Student Services. If you receive a warning letter, please contact ESS Student Services (essadv@uw.edu). Your adviser will assist you by:

- Recommending resources, such as study skills workshops or tutoring
- Help plan out quarterly course loads that will progress you towards graduation
- Assist you with choosing the correct pathway within the major, or discussing other majors at UW

Probation

Students who are on warning status, who continue to miss departmental satisfactory progress will be placed on probation. Students on probation will be notified of their status, and a registration hold placed on their student account. To remove the hold, students on probation must meet with ESS Student Services by the end of the third week after notification. Students on probation who fail to meet with ESS Student Services will not be able to register for upcoming quarters. If you receive a notification of probation, please contact ESS Student Services (essadv@uw.edu).

Dismissal

 $^{^{\}rm I}$ Available on the web are the University's Satisfactory Progress and Low Scholarship policies.

In extreme situations, students on probation in consecutive quarters may be dismissed from the major. Students who fail to communicate with ESS Student Services while on probation, or fail to meet satisfactory progress, can be dismissed from ESS majors. Dismissed students will be assigned a premajor, or extended premajor code.

ESS majors who fail to meet the departmental requirements for satisfactory progress should meet with ESS Student Services as soon as possible. Meeting with ESS Student Services can prevent progressing toward probation and dismissal. Students are encouraged to discuss all circumstances leading to a lack of satisfactory progress, including extenuating circumstances, and situations outside of academic life that may impact student success.

Appealing Probation or Dismissal

Students who are placed on probation or dismissed from the department may request reconsideration of their status. This may be done for a number of reasons, but particularly if the student believes that some facts in the student's documentation have been overlooked or misinterpreted. The appeal should be formed as a letter and explain the circumstances and provide supporting documentation for why the academic status of the student should be reconsidered. Appeals should be submitted to ESS Student Services. ESS Student Services will transfer the letter and supporting documentation to the Department Undergraduate Program Coordinator, who will consider the appeal.

Current Catalog Copy:

Taken from: http://www.washington.edu/students/gencat/academic/ess.html

The Department of Earth and Space Sciences offers the following programs of study:

- The Bachelor of Science degree with a major in earth and space sciences, with options in biology, physics, and environmental earth sciences
- The Bachelor of Arts degree with a major in earth and space sciences
- A minor in earth and space sciences
- A minor in climate science (offered jointly with the <u>Department of Atmospheric Sciences</u> and the <u>School of Oceanography</u>)

The Bachelor of Science degree is designed for students interested in geology and geophysics, and a career path in graduate studies or in the private sector where field and technology experiences and problem-solving skills are an important asset. The Biology Option enables B.S. students interested in paleontology and paleobiology to emphasize biology courses. The Physics Option allows for an emphasis in physics and geophysics. The Environmental Earth Sciences Option is designed for students interested in environmentally focused courses and careers. The Bachelor of Arts degree is designed for students who wish to obtain a broad understanding of earth sciences as a background for careers such as science journalism, environmental law, K-12 teaching, or environmental policy.

Bachelor of Science

Suggested First- and Second-Year Courses: MATH 124, MATH 125, MATH 126; PHYS 121, PHYS 122, PHYS 123 or PHYS 114/PHYS 117, PHYS 115/PHYS 118, PHYS 116/PHYS 119; CHEM 142 (or CHEM 144).

Department Admission Requirements

Students in good academic standing may declare this major at any time.

Major Requirements

101 credits as follows:

- 1. Science Core (35 credits):
 - a. Basic Supporting Science (20 credits): MATH 124, MATH 125 or equivalent; PHYS 114/PHYS 117 or PHYS 121; CHEM 142 (or CHEM 144). (Students wishing to pursue the ESS Physics Option must take PHYS 121.)
 - b. ESS Required Core Courses (15 credits): ESS 211, ESS 212, ESS 213. (Students in the ESS Physics Option may substitute ESS 205 for one of these.)
- 2. ESS Options (minimum 66 credits):
 - a. Standard Option.
 - Supporting science (18-20 credits): MATH 126; PHYS 115/PHYS 118 or PHYS 122; and two of PHYS 116/PHYS 119 or PHYS 123, CHEM 152 (or CHEM 154), MATH 307, MATH 308, STAT 311.
 - ii. ESS required (31 credits): Three of ESS 311, ESS 312, ESS 313, ESS 314; ESS 400; ESS 418.

iii. ESS electives (18-20 credits): ESS 400-level courses or any ESS 311-series course not taken as a required course, above. (May not include independent study or seminar courses numbered ESS 489 through ESS 499.)

b. Biology Option.

- Supporting science (26 credits): CHEM 152 (or CHEM 154), CHEM 162 (or CHEM 164); BIOL 180, BIOL 200; and one of BIOL 220, PHYS 115/PHYS 118, PHYS 122, MATH 126, STAT 311.
- ii. ESS required (31 credits): Three of ESS 311, ESS 312, ESS 313, ESS 314; ESS 400; ESS 418.
- iii. ESS electives (12 credits): ESS 400-level courses or any ESS 311-series course not taken as a required course, above. (May not include independent study or seminar courses numbered ESS 489 through ESS 499.)

c. Environmental Earth Sciences Option

- i. Supporting science (15 credits): STAT 311 or Q SCI 381; CHEM 152 (or CHEM 154) or CHEM 220; and one of CHEM 162 (or CHEM 164), PHYS 115/PHYS 118, or PHYS 122, MATH 126.
- ii. ESS required (44-46 credits): ESS 201; two of ESS 311, ESS 312, ESS 313, ESS 314; ESS 326; two from ESS 315, ESS 421, ESS 426, ESS 427, ESS 454, ESS 455, ESS 456, ESS 457, ESS 459; ESS 400; ESS 418.
- iii. Electives (10 credits): Additional courses chosen from any ESS 311-series course not taken as a required course above, from ESS 400-level courses (may not include independent study or seminar courses numbered ESS 489 through ESS 499), or from an approved list of courses outside ESS.

d. Physics Option

- i. Supporting science (32-35 credits): MATH 126, MATH 308, MATH 324 or MATH 136, MATH 324; PHYS 122, PHYS 123, PHYS 227, PHYS 228, PHYS 321, PHYS 322.
- ii. ESS required (14 credits): Two of ESS 311, ESS 312, ESS 313, ESS 314, ESS 418.
- iii. ESS electives (15-18 credits): ESS 400-level courses or any ESS 311-series course not taken as a required course, above. (May not include independent study or seminar courses numbered ESS 489 through ESS 499.)

All courses counted toward the major must be completed with a minimum grade of 2.0.

Bachelor of Arts

Suggested First- and Second-Year College Courses: Q SCI 291, Q SCI 292 or MATH 124, MATH 125; PHYS 114/PHYS 117 or PHYS 121; CHEM 142 (or CHEM 144).

Department Admission Requirements

Students in good academic standing may declare this major at any time.

Major Requirements

90 credits as follows:

- 1. Supporting Science (35 credits):
 - a. Basic Supporting Science (20 credits): CHEM 142 (or CHEM 144); Q SCI 291, Q SCI 292 or MATH 124, MATH 125; PHYS 114/PHYS 117 or PHYS 121.
 - b. *Additional courses*: 15 credits from department's approved list of courses in science and mathematics. See adviser for current list.
- 2. ESS Courses (55 credits):
 - a. Required courses (15 credits): Two of ESS 211, ESS 212, ESS 213. One of ESS 311, ESS 312, ESS 313, ESS 314.
 - b. *Elective Courses:* 40 upper-division credits (300- and 400-level) with at least 10 credits at the 400-level. (May not include independent study or seminar courses numbered ESS 489 through ESS 499.)

All courses counted toward the major must be completed with a minimum grade of 2.0.

Minor

Minor Requirements: 30 ESS credits with at least 15 at the upper-division level (300- or 400-level) of which at least 3 credits must be at the 400-level. (May not include independent study or seminar courses numbered ESS 489 through ESS 499.) All courses must be completed with a minimum grade of 2.0.

Minor in Climate Science: See description in the School of Oceanography listing in the General Catalog.

Student Outcomes and Opportunities

- Instructional and Research Facilities: See below, at end of graduate program requirements.
- Honors Options Available: College Honors (Completion of both Interdisciplinary Honors and Departmental Honors requirements). Departmental Honors (see adviser for requirements or visit department Website).
- Research, Internships, and Service Learning: Job and internship possibilities are posted in the department and forwarded by email to all undergraduate students.
- Department Scholarships: A limited number of departmental scholarships are available. Scholarship applications are invited from all undergraduate students in the major during spring quarter. The awards are applicable to the following academic year.
- Student Organizations/Associations: Geo Club organizes field trips and social gatherings. Information about meetings and events is forwarded to undergraduate majors by email.

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 - b. ESS Required Core Courses (15 credits): ESS 211, ESS 212, ESS 213. (Students in the ESS Physics Option may substitute ESS 205 for one of these.)
- 2. One of the four ESS Options below (minimum 66 credits):

c. Geology Option:

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- 4. ESS Courses (55 credits):
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d. *Elective Courses:* 40 upper-division credits (300- and 400-level) with at least 10 credits at the 400-level. (May not include independent study or seminar courses numbered ESS 489 through ESS 499.)

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- <u>State Licensing Endorsement Available:</u> Students interested in pursuing State Licensing for Geologists can receive guidance in course selection that will meet State requirements for the Geologist Licensing examination (see adviser for requirements or visit department Website).
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See adviser for additional continuation requirements or visit department Website.

Seattle: New option in Geology within the Bachelor of Science degree in Earth and Space Sciences (ESS-20120126)

uwcr uwcr Board owner

Edited Mar 1, 2012 9:15 AM by uwcr (Board owner)

Please review the attached 1503 pdf requesting to establish an option in Geology within the Bachelor of Science degree in Earth and Space Sciences at the Seattle campus and post comments by 5:00 pm on Thursday, March 29th.

If you have any problems viewing the attachment, please contact the University Curriculum Office at uwcr@uw.edu.

Attachments:

• Adobe ESS-20120126.pdf10.4MDownloadView

gmayer GEORGE MAYER

Edited Mar 2, 2012 11:06 AM by gmayer

I see courses pertaining to crystal structures and minerals, but nothing that drives to hard topics such as optical crystallography, and analytical laboratory methods and technques, which, I believe are essential to many job opportunities for beginning geologists. Such a sector should not be an option, but a requirement.

G.Mayer

ksdavies SIAN DAVIES-VOLLUM Posted Mar 2, 2012 11:27 AM

I would note that a BS in Environmental Science with a track in Geoscience is offered at UW-Tacoma. There are courses offered in that program that pertain to the proposed environmental focus in the new BS in Geology.

University Curriculum Office

To: Subject:

SIAN DAVIES-VOLLUM; George Mayer Response to Geology Option Comment

Prof. Davies-Vollum and Mayer,

I just wanted to clarify the purpose of the Tri-Campus Review for the "option" in Geology for which you both posted a comment. Currently the Earth and Space Sciences department offers a Bachelor of Arts and Science degree in Earth and Space Sciences. Students then chose to either do the standard course of study or one of 3 options. This proposal in only taking that standard course of study within the existing major and formally calling it a Geology option within the Earth and Space Sciences major. The curriculum is not new or changing, but because the "option" in Geology does not currently exist within the major they had to go through the review process.

Please let me know if you have any questions.

Jennifer

Jennifer Payne, M.Ed.
University of Washington
University Curriculum Coordinator
Office of the Registrar
uwcr@uw.edu
206-543-5938

Box: 355850

UNIVERSITY CAMPUSES UNDERGRADUATE PROGRAM REVIEW PROCEDURES** CHECKLIST

Title of Proposal: Option in Geology within the Bachelor of Science degree in Earth and Space Sciences (ESS-20120126)

	Earth and Space Sciences (ESS-20120126)
	Proposed by (unit name): Earth and Space Sciences
	Originating Campus:
	_x_UW, Seattle
	UW, Bothell
	UW, Tacoma
I.	Phase I. Developed Proposal Review (to be completed by Originating Campus' Academic Program Review body)
	A. Review Completed by: (list name of program review body)
	Chaired by:
	02/27/12 Date proposal received by originating campus's review body
	03/01/12 Date proposal sent to University Registrar
	03/01/12 Date proposal posted & email sent to standard notification list
	04/13/12 Date of originating campus's curriculum body approval (Note: this date must be 15 business days or more following date of posting)
	B. 2 Number of comments received. Attach the comments and a summary of the
cor	sideration and responses thereof : (1-2 paragraphs)
II.	Phase II. Final Proposal Review (to be completed by FCTCP)
	A. Review Completed by: _x_FCTCP subcommitteeFCTCP full council Chaired by: William Erdly
	4/17/12 Date request for review received from University Registrar 5/25/12 Date of FCTCP report

B. Review (attached)
YES NO _x Was notice of proposal posted on UW Website for 15 business days?
_x was notice of proposal sent to standard mailing list 15 business days in advance of academic program review?
_x Were comments received by academic program review body? _x Was response to comments appropriate? (explain, if necessary) See Note 1 belowx_ Was final proposal reviewed by FCTCP within 14 days of receipt? See Note 2 belowx Was there adherence to the University Campuses Undergraduate Program Review Process? (explain, if necessary)
Note 1 – Comment responses were appropriately addressed by the Universiy Registrar's Office.
Note 2 – Slight FCTCP review delay related to committee availability.
C. Recommendation
X Forward for final approval Forward to Provost because of University issues (Explain) Return to campus council because of insufficient review (Explain).
**Endorsed by Faculty Senate Executive Committee, 1/10/05, modified 1/31/06; These procedures apply to new undergraduate degrees, majors, minors (and certificates) and substantive changes to same